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ABSTRACT

This paper examines role conflict and role overload of physicians. A comparison of women physicians, women neighbor controls, and men physicians is made in an attempt to prove that role conflict and overload are distinct problems of the women physicians. A 207-item questionnaire concerned with demography, education, work patterns, household compositions and responsibilities, life cycle decisions, medical issues, and a variety of attitudinal scales was used. From this, a profile of the model woman physician is developed and thus compared to the other study groups. Previous studies from 1957 and 1969 are used to examine the change in women physicians' roles and attitudes. While there are definite differences in role between men and women physicians, this study concludes that both groups work too hard and do not seem to have enough time for personal growth or for their families and that this problem is related to their roles as physicians. Statistical illustrations and a bibliography are included. (MA)

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CURRENT STATUS OF WOMEN IN MEDICINE

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Two years ago a colleague told me emphatically that he had never met a woman physician who works as hard as he does. This year when he asked me if women doctors were contributing to medicine, the dean of our medical school told him, "You should be aware that Dr. Heins has published on this very subject". My colleague's retort was a blunt question, "Was the research done by women?". Last year, my colleague denied the productivity of women physicians. This year he added the distressing concept that those with ovaries do either poor or dishonest research. If I were going to answer this man, I would use Alexander Pope's couplet,

> *"To dear - bought wisdom, give the credit due,*
> *and think for once a woman tells you true".*

Rather than answer him on my "let's not waste any spit" theory of personal interaction, I will tell you about our research and you can judge for yourself.

The study "Practice and Life Patterns of Women and Men Physicians" has been in progress since 1974 at the Wayne State University School of Medicine. The study is a comparison of women physicians, women neighbor controls and men physicians. We have been looking at factors involved in productivity, life cycle decisions, role overload and role conflict of men and women physicians as well as studying demographic and attitudinal data in all three groups. The study, for the most part, was designed to look at attitudes of physicians - the productivity data was a by-product.

We designed, pre-tested and administered a 207-item questionnaire to a random sample of nearly 100 women and men physicians in metropolitan Detroit and to a similar number of women controls who were neighbors of the women physicians. The questionnaire contained items related to demography, education, work patterns, household compositions and responsibilities, life cycle decisions, medical

issues and a variety of attitudinal scales. Although surveys of women and men physicians have been done in the past which asked factual questions, our questionnaire also asked why. An attempt was made to get some idea of the reasons behind practice and life decisions as well as the feelings and pressures involved.

What have we learned from our study?

I. Who is the woman physician? - The modal women physician in our sample is 46 years old, Caucasian, Protestant, a self-assessed member of the upper middle class and is statistically as likely to be a Democrat as a Republican. She is married, most likely to a physician and has 2.5 children. She worked continuously since graduation from medical school and is presently working full-time; she is board-certified and her main task is patient care in one of the primary care specialties. She

works in a private office and is self-employed with median earnings of $36,800 per year (in 1974 dollars).

Nearly half of the women physicians in our sample were reared in an urban environment. They came from quite stable homes with 86% reporting they had lived continuously with both parents until age 18. Forty-nine percent were the only or eldest child. Fifty-three percent of the respondents' mothers had never worked outside the home. Thus, the majority of the women physicians in our sample grew up in the traditional homes with non-working mothers who spent little time away from home, which is different from the findings of Ginzberg, et al, who noted that three quarters of the women professionals in their study had mothers who had worked outside the home. However, nearly half of the women physicians' mothers had positive feelings about women working and 84% felt positively about their daughter's career.

II. Productivity of women physicians has increased. Slide 1 shows a comparison of the women physicians in our study with two previous studies published in 1957 and 1969. These studies are not directly comparable because of different sampling techniques. However, as Slide 1 shows, more women are working full-time at the time of survey, a higher percentage of women are board certified, do primary care and list patient care as their main task. We have also been able to show that more women have worked continuously full-time since graduation from medical school than in previous studies.

Slide 2 shows a comparison between the women and men physicians in our study utilizing the "Medical Work Ratio", a measurement we devised in order to determine the full-time equivalent work life of physicians. The MWR equals full-time

equated months in medical work since medical school graduation, divided by total months since medical school graduation. Men physicians did have a higher MWR than women physicians, but most physicians work all or nearly all of the maximum potential time they could have worked. All of the men and all but 17% of the women worked at least 75% of the potential time they could have worked since receiving their M.D. degrees. Only 9% of the women physicians worked less than half of the potential time they could have worked. There was a definite correlation between MWR scores and the presence of children, as almost all of the women who had less than a perfect MWR score had children. Yet a perfect MWR was found in 53% of the women physicians with children and 62% of the women who did have work interruptions missed two or less years of potential work time, with 59% working continuously full-time since receiving their medical degree.

Slide 3, compares our sample with data of Jussim and Muller who using the Powers data calculated that women physicians work two-fifths fewer hours in their lifetime than do men physicians. Utilizing our MWR we found that the women physicians in our study have a mean MWR of .88 compared to .99 for the men. The ratio of these two ratios is .89 which means that, in our study, women worked nearly 90% as much as men did.

Eighty-four percent of the women in our study were engaged in medical work at the time of the survey; 90% full-time. Only 7% of the entire sample were not working for reasons related to being a woman: child-bearing and child-rearing. After one subtracts those physicians of both sexes who were ill or retired, there is no question about the fact the difference in the work ratios between men and women physicians is a result of time

taken out by women for child-bearing and child-rearing. Yet despite the major responsibilities in the home that most female physicians have, it is apparent they take little time out from the work force compared to men physicians who do not have these added responsibilities.

Slide 4 shows patterns of medical work in the men and women physicians. A large number of women practice in private offices though more women than men work in a hospital, clinic or medical school. A very small number of men and women are in solo practice, though more women are salaried. Virtually identical numbers of men and women list patient care as their main task and a higher percentage of women than men are in primary care specialties which we rather rigidly defined as family or general practice, obstetrics/gynecology, pediatrics

or internal medicine, excluding the subspecialties in the latter two areas.

III. Women physicians, for the most part, are carrying out dual roles in which they work full-time and have responsibility for a family as well. Slide 5 shows the life status of women physicians compared with the two studies we used for work status comparisons. As you can see, fewer women never married, more were married by the time of graduation from medical school, fewer are married to a doctor and a larger percentage have children, with the average number of children nearly double what it was in the 1957 study.

Looking at certain demographic parameters of the men and women physicians as shown in slide 6, there is a statistically significant difference between the two samples in terms of those

married at the time of the survey, those never married, and those divorced at the time of the survey. More men are married, more women have never been married and in our sample more women were divorced at the time of the survey. Of interest is the fact that while nearly equal numbers of men and women physicians had been divorced, only 50% of the women, compared to 100% of the divorced men had remarried. Many more women physicians are married to physicians or other non-physician members of the professional class. The men physicians have more children. Of interest is the fact that 98% of the men, and only 69% of the women had children and the men had significantly more children than did women when one compares the ones who had ever been married, the total sample or those currently married.

Slide 6 also shows that the mean income of the men physicians

is greater than that of the women physicians and the reverse is true in terms of the spouses' income. Mean education of the spouse of the men physicians is less and the women physicians' parents attained higher levels of education.

The 87 women physicians in our study had responsibility for households containing nearly 300 persons including 86 children under the age of 18. Although 70% have domestic help at least one day a week, 76% of the women in our sample reported that they do all the cooking, shopping, child care and money management in the household. As Slide 7 shows, even when the tasks of the household are delegated to domestic help or relatives, women physicians report responsibility for virtually all household tasks. This is contrasted sharply with the men physicians. Almost none of the men do household tasks or have responsi-

bility for them with the exception of money management. Increased productivity in the face of greater family responsibilities seemed to illustrate the "superwoman" role that many women physicians play.

As women doctors have responsibility for more husbands and children than in previous studies, it is important to look at the domestic help situation. Slide 8 shows that, when one compares households of women physicians to the households of men physicians (in which less than 20% of the wives were working), the number of those with domestic help one to one and one half days a week is nearly identical, although more women physicians report they have full-time domestic help. The difference between the two groups in the slide is far from statistically significant. The wives of men physicians, the vast majority of

whom do not work, are not distinguishable on the basis of household help from the women physicians who do work and in a very demanding profession.

Eighty percent of the sample of women physicians answered affirmatively to the question, "With both a job and house to look after, do you feel there are too many demands made on your time and energy?" And when asked how the pressures of too many demands on their time and energy could be alleviated, over one third answered "more or better household help."

IV. Attitudes. When compared to men physicians, women physicians are significantly more liberal and more egalitarian. Slide 9 shows areas in which the two samples differed significantly. Age (the women physicians are significantly younger); Religion (60% of the women compared to 38% of the men were

Protestant, over twice as many men as women were Jewish and Catholic, respectively. There was no difference between men and women in their attendance of religious services. Slightly more than 24% of both samples attended religious services weekly but more women than men never attended.); Self-assessed Social Class (the majority of both groups described themselves as upper middle class but 10% of the men compared to only 1% of the women placed themselves in the upper class. This is of particular interest when it is noted that the women physicians' fathers were significantly better educated than were the fathers of the men physicians and more of the women's fathers than the men's fathers were professional.); Political Preference (equal numbers of women physicians were Republican or Democrat but four times as many men physicians were Republican); and

Median Income, (nearly half of the men reported annual incomes of $60,000 or more while only 17% of the women were in that income bracket).

Slide 10 shows mean scores of selected scales: Briefly, the scales were as follows:

Political Liberalism - Conservativism was measured by use of a previously validated scale.

The Medical Politics scale consisted of questions to determine a medical conservative vs. medical liberal position.

The Medical Feminism scale included five questions concerning special recruitment programs for women, flexible education and training, re-training programs and day care.

Feminism was measured by a series of statements reflecting the idealogical stance of the modern feminist movement.

Individualism: A 7-item scale to measure orientation toward individualism - collectivism was devised.

Egalitarianism was measured by the previously developed and validated Dempewolff scale.

Mean scores on five of the six scales showed that women physicians are significantly more on the "liberal" side than are men physicians. The one exception was that both groups are individualistic. Our original hypothesis was that women physicians would be similar to men physicians in general attitudes and social-political orientation. We felt that women physicians would have adopted the attitudes of their majority role models as minorities generally do when they enter a new area in small numbers. However, the women physicians have not shown this, a finding that may have great import for the future. As you know, women comprise just under

25% of the Year I entering medical students. Thus in 7 to 10 years, one out of every four physicians entering practice will be a woman. It is possible that an increasing number of women physicians who are more liberal, more egalitarian and more likely to be providing primary care may bring to American medicine some of the qualities the public is seeking.

Certain specific questions from these scales are shown on Slide 11. All of these differences were statistically significant. It is particularly interesting that women physicians are much more likely to want health care costs to be decreased for the patient. It is not difficult to expect women to be more in favor of part-time internships and residencies, the Equal Rights Amendment and eradication of sexism from schools. Two questions were asked about day care.

Of interest is the fact that 37% of women do not feel day care centers should be provided at medical schools and hospitals and 27% of the women disagree with the statement that society should provide day care centers for all women. It is obvious that the majority of men physicians in the sample are opposed to child care being provided outside the home by other than the child's mother. But what is especially interesting to me is that close to a third of the women seem to hold the same position. It is also noteworthy that nearly twice as many women feel that under no circumstance should our country use nuclear bombs. As for the last item, "Women should ask men out for dates if they feel like it", men physicians seem more in favor of this than women physicians. Another surprise: women physicians differ from conservative men physicians in this matter.

V. Role Overload and Role Conflict Sixty percent of the men and 54% of the women physicians felt there were too many demands on their time and energy. When asked under what circumstances this overload was likely to occur, three times as many men as women answered the pressures of work were the reason. Significantly more women than men related role overload to children and twice as many women as men mentioned responsibilities they had at home as a causal factor. Postulated relief from role overload differed markedly in the two groups. Over three times as many men as women said they should cut down at work in order to achieve relief, while nearly 50% of the women felt they needed more help at home, either paid domestic help or assistance from their spouse or family. More women than men seemed to feel they needed to modify themselves in some way, i.e., become

better organized or more flexible.

Our original hypothesis was that role conflict and role overload would be a problem for women physicians but we found this was a problem for men physicians as well who complained in open-ended questions they did not have sufficient time for their families or themselves.

One personal conclusion I have learned from our study is that both men and women doctors work too hard and do not seem to have enough time for personal growth or their families. The problem is related to the role of a physician. The expectation that self, school and society have of the physician should be looked at and studied. Are there models of training practice patterns that can lead to excellent patient care without causing to the stresses of overwork that effect physicians -

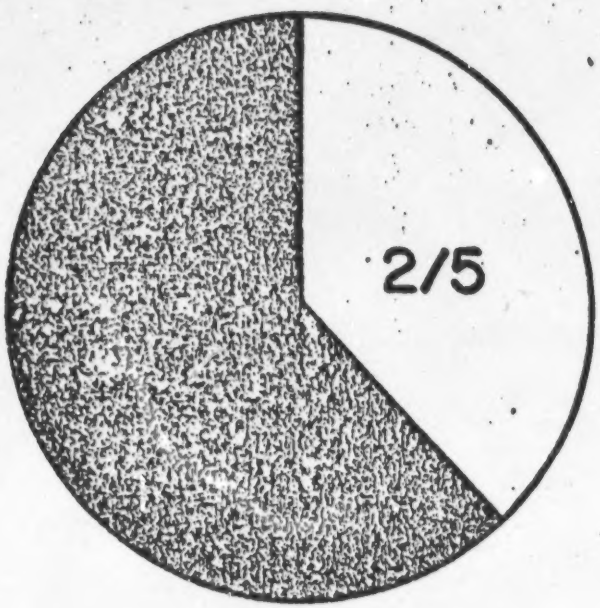
lack of time for self and family, alcholism, drug abuse, and suicide. Our profession should study itself carefully in order to determine what price productivity - for both men and women.

Studies	% Working at Time of Survey	% Full Time at Time of Survey	% Board Certified	% Primary Care	% Main Task: Patient Care
Dykman and Stalnaker (1957)	89	56	28	55	73
Powers et al. (1969)	91	54	----	----	67
Heins et al (1976)	84	76	54	64	86

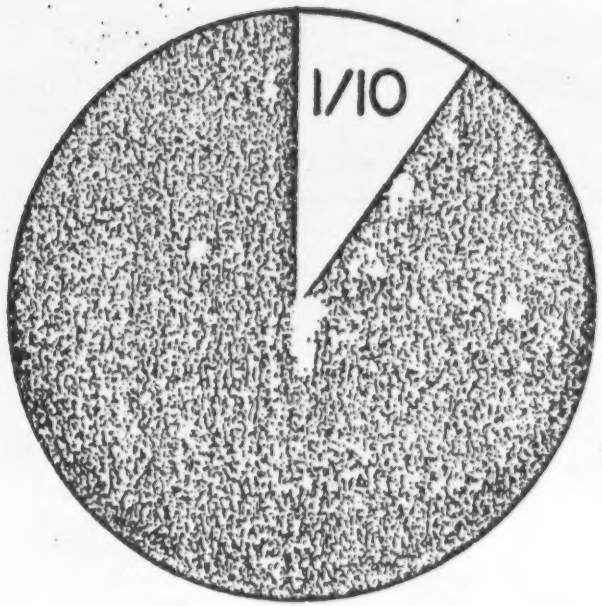
Comparative Work Status of Women Physicians

Score	% Women Physicians	% Men Physicians
1.0	59	87
.99 - .751	24	13
.75 - .501	8	0
.50 - .251	5	0
.25 - .01	2	0
0.0	2	0
	100	100
Mean MWR	.880	.993
Median MWR	.999	1.000

Medical Work Ratio



Jussim & Muller
(based on 1960 data)



Heins et.al.
(based on 1976 data)

Amount of Potential Work Time "Lost" by Women Physicians, Compared to Men Physicians.

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SLIDE 3

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	% Women Physicians	% Men Physicians
WORK LOCATION		
Private office	58	77
Hospital, lab, clinic	32	19
Medical school, government	11	4
	101*	100
TYPE OF PRACTICE		
Solo practice	37	42
Partnership, group	33	45
Employed	30	13
	100	100
TYPE OF MEDICAL WORK		
Main task: patient care	86	87
Primary care	51	39

*rounding

Patterns of Medical Work

	% Never Married	% Married by Time of Graduation from Medical School	% Married to M. D.	% with Children
Dykman and Stalnaker (1957)	31	15	52	52 (Avg. # 1.8)
Powers et al. (1969)	23	29	56	67
Heins et al. (1976)	23	44	43	69 (Avg. # 2.5)

Comparative Life Styles of Women Physicians

	Women Physicians (n=87)	Men Physicians (n=95)	p
Married at time of survey %	67	94	< .01
Never Married %	23	2	< .01
Previously divorced %	12	10	N. S.
Divorced at time of survey %	6	0	< .05
Married to physician %	36	2	< .01
Married to non-physician, professional class %	29	4	< .01
Mean number of children of those with children	2.5	3.2	< .01
Median income of respondent	$36,785	$59,230	< .01
Median income of spouse	$27,780	$ 4,063	< .05
Mean education of spouse	18.5 yrs.	15.2 yrs.	< .001
Mean education of father	14.4 yrs.	12.7 yrs.	< .01
Mean education of mother	13.1 yrs.	12.2 yrs.	< .01

Selected Demographic Data

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SLIDE 6

	Women Physicians	Men Physicians	Women "Neighbors"
Percent Responsible for:			
Cleaning	88	7	90
Cooking	85	7	99
Child Care	77	3	77
Marketing	83	10	97
Laundry	80	8	95
Money Management	54	57	45

Household Responsibilities

	% Women Physicians	% Men Physicians
0 Days	31	35
1 - 1.5	34	33
2 - 4.5	16	24
5 +	19	8

Household Domestic Help
($p > .05$)

Age
Religion
Self-Assessed Social Class
Political Preference
Income

Scale	Women	Men	p≤
Political Position	3.2830	3.0040	.001
Medical Politics	3.1977	2.9000	.001
Medical Feminism	3.7575	3.2437	.001
Feminism	3.6029	3.1365	.001
Individualism	2.8396	2.7629	NS
Egalitarianism	3.1003	2.9503	.002

Mean Scores on Selected Scales

	% Women Physicians	% Men Physicians	p
Health care financing should be revamped to decrease costs for the patient	86	70	<.02
Part-time internships and residencies should be made available at all medical institutions	58	37	<.001
Day care centers should be provided at all medical school and hospitals	63	46	<.05
Under no circumstances should our country use nuclear bombs against anybody	58	29	<.001
The Equal Rights Amendment should be ratified by all States	84	63	<.02
Sexism should be eradicated from the schools. Girls should be advised about the same occupational opportunities as boys; text books should show women and men in equal roles	93	73	<.001
Society should be prepared to provide day care centers so any woman who wants to hold a job can do so	73	39	<.001
Women should ask men out for dates if they feel like it	67	82	<.05

Percentage of Respondents In Agreement

BIBLIOGRAPHY

Dykman RA, Stalnaker JM: Survey of women physicians graduating from medical school 1925-1940. J Med Educ 32:3-38, 1957.

Ginzberg E, et al: Life Styles of Educated Women. New York, Columbia University Press, 1966.

Heins M, Smock S, Jacobs J, and Stein M: Productivity of women physicians. JAMA 36:17, 1961-1964, 1976.

Heins M, Smock S, Martindale L, et al: A comparison of the productivity of women and men physicians. JAMA 237:23, 2514-2517, 1977.

Heins M, Smock S, Martindale L, and Jacobs J: A profile of the woman physician. (accepted for publication - JAMWA).

Heins M, Smock S, Martindale L, et al: A comparison of women physicians and their women neighbors. (submitted for publication).

Heins M, Smock S, Martindale L, et al: Life cycle decisions and the productivity of women and men physicians. (submitted for publication).

Heins M, Smock S, Martindale L, et al: Attitudes of women and men physicians. (submitted for publication).

Jussim J, Muller C: Medical education for women: How good an investment? J Med Educ 50:571-580, 1975.

Powers L, Parmelle D, Weisenfelder H: Practice patterns of women and men physicians. J Med Educ 44:481-491, 1969.